Electrolux Group

TECH TIP

RFTT151B

11.23.15

Slim Ice Servicing

BRAND: Frigidaire

MODEL: LGHK2336TF FPSC2277RF LGHX2636TF FPSC2278UF FGSC2335TD FGSC2335TF LGHK2336TD LFSC2324VF FGSS2635TF FFSC2323TS DGHX2655TF FGSS2635TD FGSS2635TE FGSS2635TP LGHX2636TD FGSC2335TD FPSS2677RF

SERIAL: All

CONDITION: Becoming More Familiar With SXS Ice Maker.

SOLUTION: Review the Following Powerpoint:

Electrolux

Slim Ice Servicing

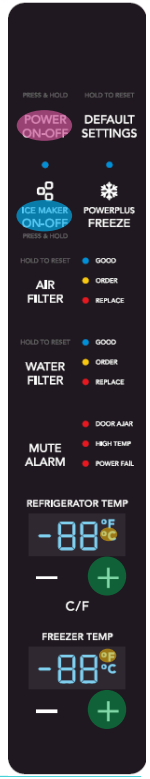
Tom McCollough

11/23/2015

Turning the Ice Maker On and Off & Accessing and Using the Ice Maker Service Mode

- **Turn IM On and Off**
  - Press and Hold the ***ICE MAKER ON-OFF*** button for 3 seconds to toggle the IM on and off (button highlighted in **blue** in the illustration).
  - The blue LED above the button is illuminated when the IM is ON.

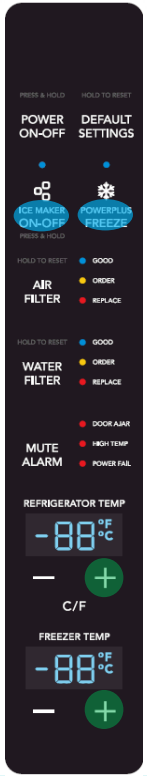
- **Slim Ice Service Mode**
  - The ice maker must be ON in order to access the Service Mode.
  - The Service Mode is accessed by pressing and holding the ***FF+*** and ***FZ+*** buttons together for 5 seconds (buttons highlighted in **green** in the illustration).
  - Press and release the ***FF+*** and ***FF-*** buttons to scroll up and down through the tests.
  - The Service Mode is exited by pressing and holding only the ***FF+*** button for 5 seconds.
    - This the same way as the IM Service Mode is accessed and exited for the Frigidaire Pro FDBM.
  - When the Service Mode is active, the test number along with "**°C**" (highlighted in **orange** in the illustration) is displayed in the FF temperature window, and the test result along with "**°F**" (highlighted in **orange** in the illustration) is displayed in the FZ temperature window.
  - Service Mode Tests – note that the Slim Ice service mode operates the same as the FFIM service mode on FD. Troubleshooting the system is very similar – the main difference is that the Slim Ice does not have an evaporator nor the fan, bimetal, and defrost heater associated with it. It also does not have gaskets.
    - **52:** IM Temperature Test – This test displays the temperature of the ice mold if the temperature sensor is good. Otherwise, it will display "SH" if the sensor is shorted, or "OP" if the sensor is open.
    - **55:** Manual water fill for the IM. When this test is active and the refrigerator ***POWER ON-OFF*** (button highlighted in **magenta** in the illustration) button is pressed, the unit will activate the IM water fill valve.
      - The system will use the fill size that is currently set in the IM Cube Size function.
    - **57:** Because the software for the Slim Ice Service Mode is mostly a carryover from the FD FFIM, this test still exists in the programming, but it has no functionality (i.e., if you activate the test, nothing happens) for SXS because the Slim Ice module is already in a FZ and does not need nor have a dedicated fan. All air circulation is done with the FZ evaporator fan. Testing of the FZ Evaporator Fan is done with the System Service Mode test #15.
    - **58:** Bail Arm Test - The Test will automatically begin when you enter or pass test 58C.
      - The Ice Maker Mold will begin to turn, lowering the bail arm, then resetting it continually until you exit the test. Both of the following conditions must be met for the test to pass:
        - If the bail arm is allowed to fall freely, the mold will return to the home position and the Freezer display will show OFF; no alarm will sound.
        - If the Bail Arm is held in the UP position as the mold rotates (simulating the presence of a full ice bin), the alarm will sound as the tray returns to the home position, and the Freezer display will show ON.
      - The FZ display will show Er if an Error occurs
    - **63:** Press and Release the ***ICE MAKER ON-OFF*** key to activate The mold will rotate, twist, and return home.
      - The FZ display will show 1 if Good, 2 if an Error occurs



Ice Cube Size Function

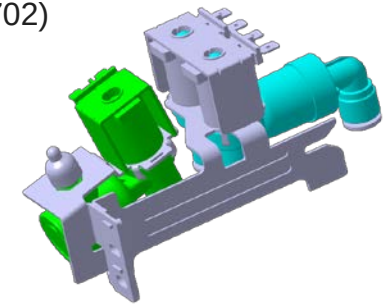
IM Cube Size Function

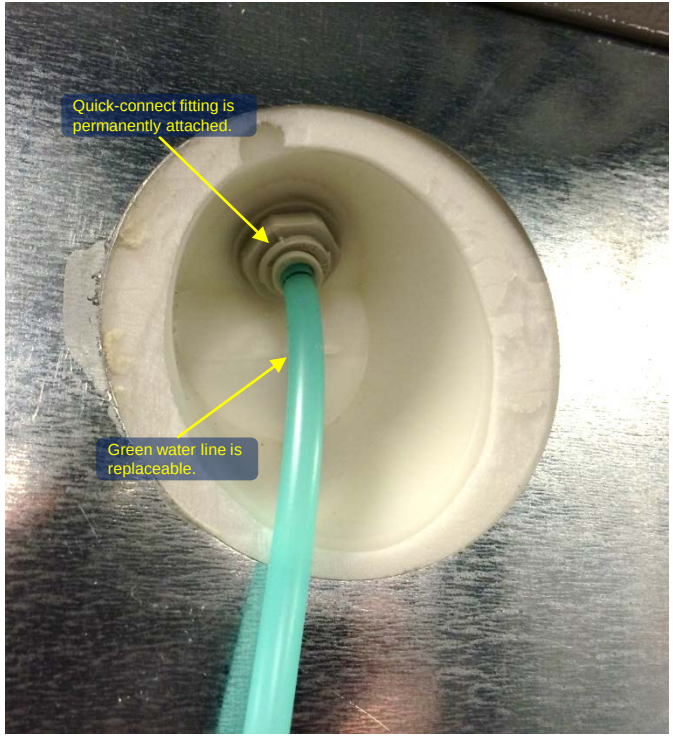
- The Ice Cube Size function exists for installers and servicers to use for adjusting the size of the IM Fill depending on water pressure in order to get the correct amount of water into the IM for optimal operation (the ideal fill is 100 cc [3.4 oz.]). It is not intended for the purpose of the customer's desire to have larger or smaller cubes. Therefore, it is not mentioned in the customer's Use & Care Guide. The factory setting of small will work fine for most customers.
  - Small (4.6 sec) should be used when the water pressure is about 45 - 50 psi and up
  - Medium (5.8 sec) should be used with the water pressure is below 40 - 45 psi, but higher than 25 - 30 psi
  - Large (7.2 sec) should be used when the water pressure is below 25 - 30 psi
- Accessing and using the Ice Cube Size function
  - Press and hold the ***ICE MAKER ON-OFF & POWERPLUS FREEZE*** buttons simultaneously for 5 seconds (buttons highlighted in **blue** in the illustration).
  - Use the ***FF+*** and ***FF-*** buttons to increase and decrease the setting (buttons highlighted in **green** in the illustration).
    - One horizontal bar in the FF display = Small, Two bars = Medium, & Three bars = Large
  - The new setting is automatically saved when changed. The function will exit automatically after 10 seconds.



Water line to Ice Maker
Water Valve for Ice maker

- Water Line
  - The water line that carries water through the cabinet wall and into the ice maker is foamed directly into the cabinet wall, and is therefore not serviceable.
  - The water line that carries water from the valve to the top of the cabinet is serviceable. The water line is inserted into a quick-connect fitting which permanently attached to the cabinet. See picture at right.
- Water Valve
  - The Slim Ice system uses the same water valve as all other SXS models (Water Valve P/N 242252702)





Removing and Servicing the Slim Ice Module

Slim Ice Module installed in a unit

Remove the Bucket

The Buckets are similar to the FDBM FFIM Buckets except they are taller and hold more ice.

CD Bucket P/N A03915101
CD Ice Storage Capacity = ~8 lbs.

SD Bucket P/N A03915102
SD Ice Storage Capacity = ~10.5 lbs.

Standard Depth Bucket shown

Note that the support structure of the IM is capable of supporting greater than 50 lbs.

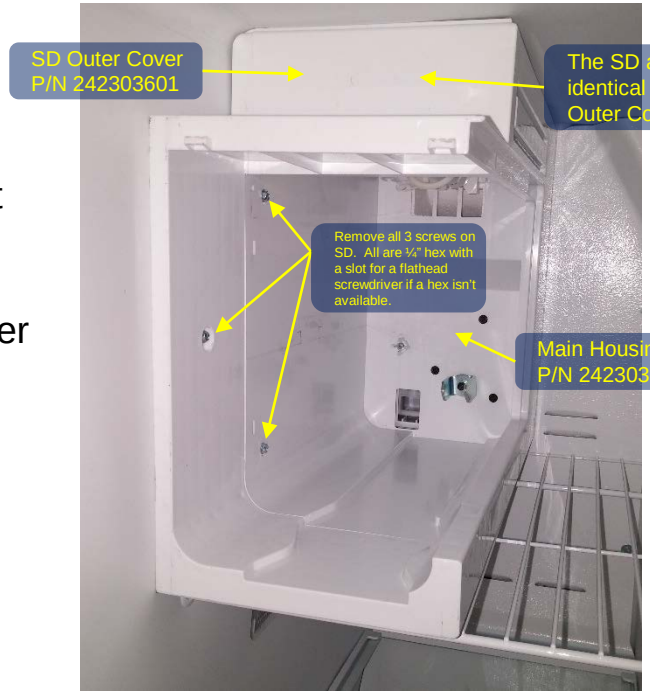
Removing and Servicing the Slim Ice Module

The only difference between SD and CD Slim Ice Modules is the Outer Cover as seen in the pictures.

To service the module, it is easiest to simply remove it completely from the unit so it can be sat on a table.

The module hangs from the top of the liner using 4 hooks that are inserted into pockets in the liner. The module is removed from the unit by removing the screws as shown and pulling the module forward about an inch. The hooks will slide out of the pockets and the entire module will drop down and sit on the freezer shelf underneath it

Standard Depth



Counter Depth

Removing and Servicing the Slim Ice Module

Once the module is sitting on the shelf, unplug the electrical connector from the back of the freezer. The entire module can now be removed from the unit.

The Styrofoam Air Duct, Auger Motor, Crush/Cube Solenoid, Auger Motor Housing, or Motor Housing Cover are all accessible from the rear of the module.

Removing and Servicing the Slim Ice Module

The Styrofoam Air Duct is held in place by a piece of tape. Cut or remove the tape to release the Air Duct.

Air Duct P/N 807723201

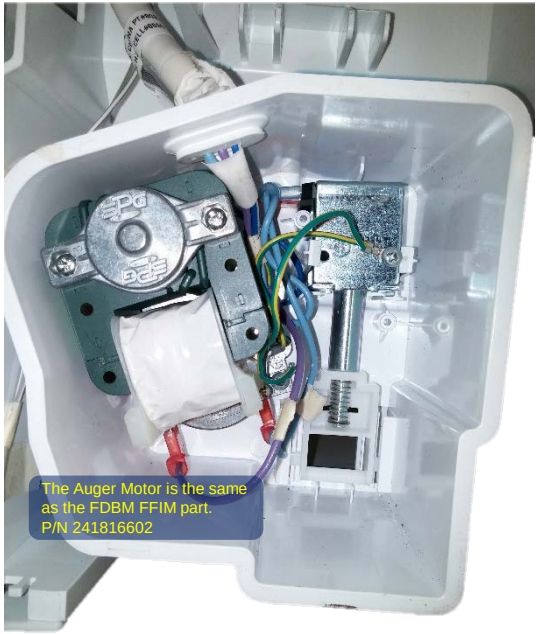
The Motor Housing Cover is held onto the Auger Motor Housing with snaps around the edge. Unsnap the snaps to remove the Cover.

Motor Housing Cover P/N A04162301

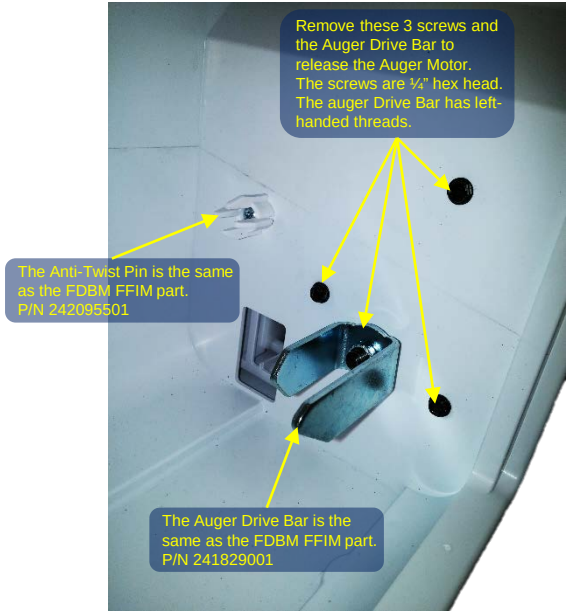
Detail of the snaps

Removing and Servicing the Slim Ice Module

With the Motor Housing Cover removed, the Auger Motor and Solenoid can be accessed.

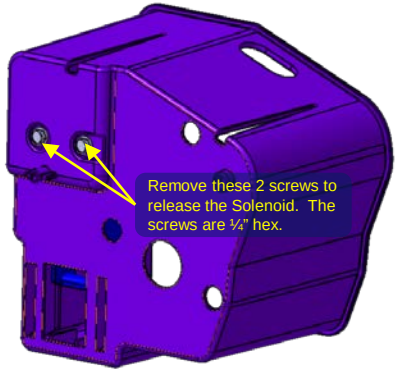


To remove the Auger Motor, first disconnect the wiring connections from the motor, then remove the 3 screws and the Auger Drive Bar as shown.



Solenoid Removal

The Solenoid is attached directly to the Auger Motor Housing. Therefore, removing the Solenoid requires that the Auger Motor Housing be removed first; which in turn requires that the Auger Motor and the Anti-Twist Pin be removed. At this point, the Auger Motor housing will separate from the main Housing and the screws for the Solenoid will be accessible.

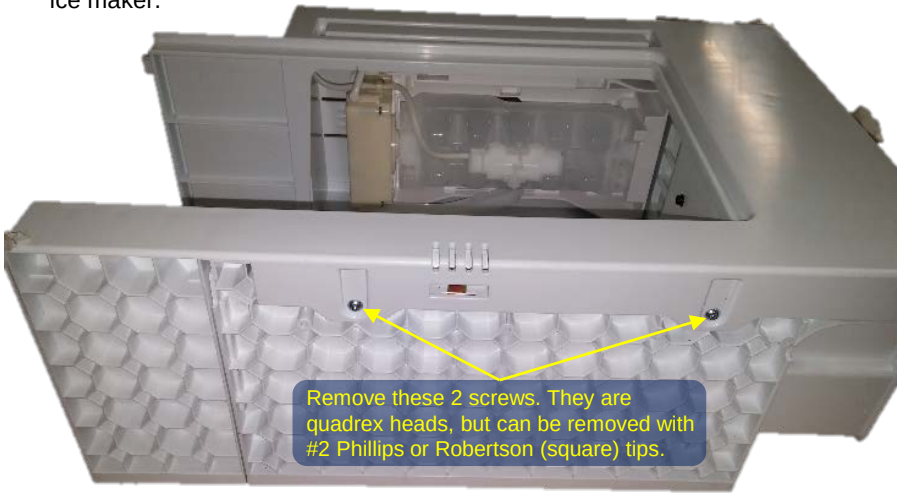


Solenoid P/N 241675701
Auger Motor Housing P/N 242305201

Removing and Servicing the Slim Ice Module

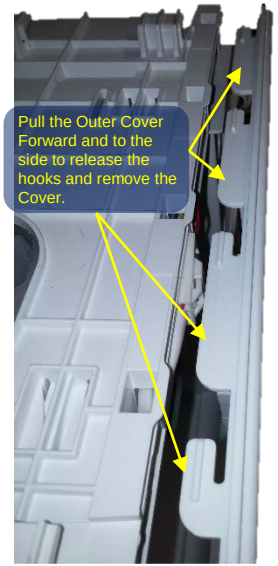
Removing the Ice Maker

The wiring harness connection for the ice maker is underneath the Outer Cover of the module. Therefore, the Outer Cover must be removed first to be able to remove the ice maker.



Standard Depth Outer Cover Removal

With the 2 screws removed, the two latches on the back side of the cover can be unlatched, and the cover can be pulled forward and to the side to remove it from the main housing.



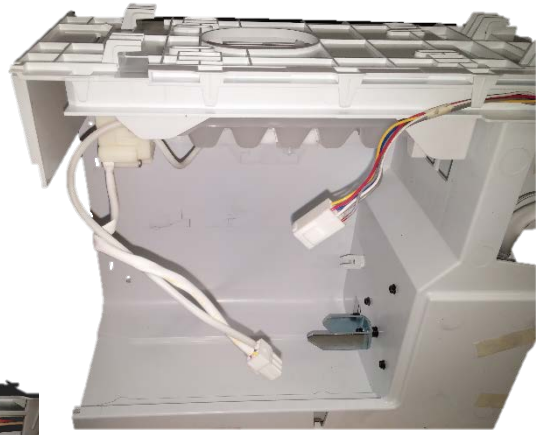
Removing and Servicing the Slim Ice Module

Counter Depth Outer Cover Removal

For CD, this screw has to be removed. And there are not any latches on the back side of the cover to be unlatched. Once the screw is removed, the cover can be pulled forward and to the side to remove it from the main housing.

Ice Maker Removal

With the cover removed, the ice maker electrical connection is exposed as shown below. Disconnect the ice maker as shown at the right.

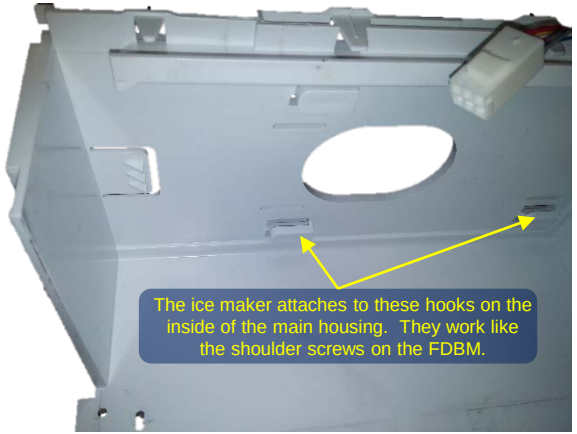


Removing and Servicing the Slim Ice Module

Ice maker Removal

Flex the retainer tab for the ice maker on the top of the main housing upward, and slide the ice maker toward the front of the main housing

The ice maker will now separate from the main housing.

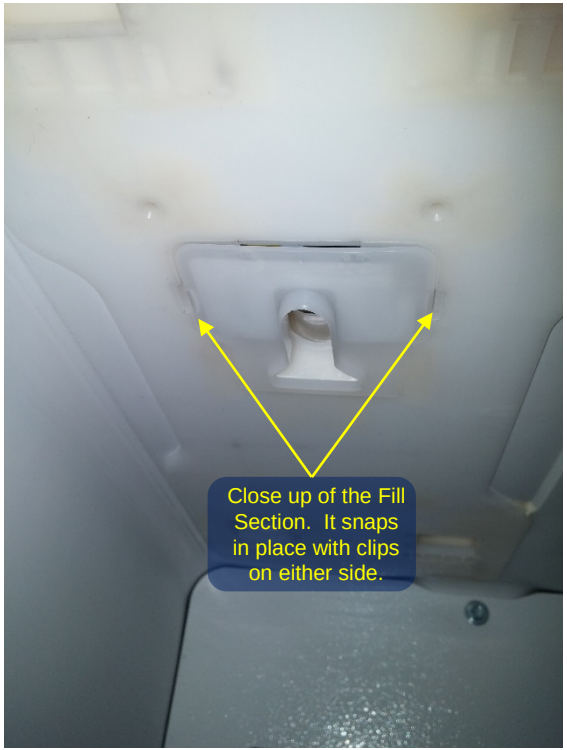


Removing and Servicing the Slim Ice Module

With the Outer Cover removed, the Freezer Thermistor is accessible. When replacing the thermistor, be sure that all the wires are tucked into the channels along the bottom of the main housing to prevent them from being pinched when the Outer Cover is reattached.

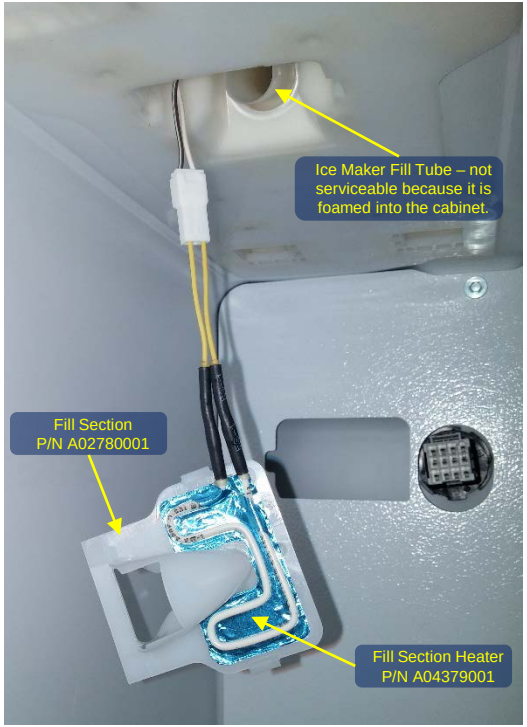
Removing and Servicing the Slim Ice Module

This is the freezer with the Slim Ice Module removed.



Removing and Servicing the Slim Ice Module

This is a view showing the Fill Section unsnapped and hanging by the lead wires of the foil heater. The heater is used to prevent the ice from forming on the tip of the outlet of the Fill Section. <u>Ice on the tip of the Fill Section will cause the water to splash onto the inside walls of the bucket during the fill. This water can also drip onto the cubes in the bucket causing clumps that will not dispense.</u>



To install the Fill Section with the Heater, the heater leads must be folded across the front of the Fill Section as shown below.

Removing and Servicing the Slim Ice Module

To reinstall the Slim Ice module in the refrigerator, place it on the shelf as shown below, then plug in the electrical connection in the back, lift the module and insert the hooks (yellow circles) on the top of the main housing into the pockets in the foamed-in ice maker bracket, push the module inward to seat the hooks, and drive in the screws at the front (3 for SD, 2 for CD).

Main Housing
P/N 242303501